Office of Inspector General's Report on Mapping Evaluation - Leonard Koczur, David Maddox, and Ed Jurkevics

CHAIR WATLINGTON: Thank you. Next on the agenda is "Perspective on GIS Mapping," and that is with the IG office, and then we're going to introduce the panel.

MR. KOCZUR: Thank you. This morning we want to brief you on the mapping evaluation project the OIG conducted with our two Georgia programs. This has been an extremely interesting and educational experience for the OIG, and I think for our grantees in Georgia also.

Mapping involves very complex technology, and producing useful maps has been a challenge. While the challenge has been great, the first phase of the project has been successful. Our goal was to determine the usefulness of maps in helping managers in their strategic and operational planning. This has been achieved.

Mapping is a useful tool for helping managers promote legal services, evaluate access to such services, deploy resources, and manage their programs. Maps allow the visual presentation of data on where clients live, where they receive services, and various other aspects of their -- of the geographical service area represented by the grantees.

Maps present information in a much more persuasive way, as I think you'll see when we put the slide -- than can possibly be done with statistical data shown in charts, graphs, or even in computer spreadsheets.

With that, I would like to introduce Dave Maddox, the Assistant Inspector General for Resource Management, who is responsible for the mapping evaluation and will discuss the project.

MR. MADDOX: Thanks, Len. The goal of this project is producing informed and independent evaluation of how maps can support planners and grantee managers at state, local, and national levels. Other social service agencies work has led us to believe that mapping could offer significant benefits for legal services.

For example, maps can demonstrate the extent of the need for services and support planning efforts to increase access to those services. Maps can measure accomplishments and show the results to others. Leadership can use maps to garner additional program support, promote missions such as equal access to justice, and monitor progress towards achieving the program's goals.

Objects of the evaluation are: To identify prototype maps valuable to legal services decision makers at all levels; show access to legal services, to the extent

possible, by mapping poverty in income, populations relative to cases closed; and to produce a recipe that grantees could follow to create maps on their own at reduced costs.

Georgia was selected as the site of this project because it nicely represents both rural and urban service areas, and it is also in the fastest growing part of the south. The two grantees in Georgia actively participated, supplied historical case data, and represented grantees' interest in mapping.

Georgia Legal Services Program or GLSP, led by
Executive Director Phyllis Holmen, serves the entire state
except for metro Atlanta. The Atlanta Legal Aid Society or
ALAS services metro Atlanta and is led by Executive Director
Steve Gottlieb.

I would like to thank Ms. Holmen and Mr. Gottlieb for their key and active participation in this project.

Unfortunately, neither could join us here in Washington today.

To perform the mapping work, we hired local

Georgia contractors: Peachtree Geographics converted the

case data to map locations; Jordan Jones & Goulding, an

engineering firm, produced the maps; also providing

expertise in designing and managing the project was Edward

Jurkevics from Chesapeake Analytics, who is here with us

today.

In this phase of the mapping evaluation, the OIG found maps to be powerful and credible tools for legal services, and to be useful for planners and grantees to promote their programs, to identify low income populations, to evaluate access to legal services, and to decide how to deploy resources, and tools for state planning and delivery measurement.

Maps create a new visual perspective for making the case for legal services the grantees nor their funders have never seen before. Maps offers a standardized measure of access to legal services in that they provide the numbers and the locations of those who receive legal services, as compared to those who are income-eligible.

Now we'd like to show you some of the maps. Ed?

MR. JURKEVICS: Thanks, Dave. We are going to, in a second, folks, behind you, but let me make a couple of introductory remarks. And I'd like to do that by starting at the end and tell you what are accomplishments were.

First of all, we produced this map book of 132, we hope, professional grade maps here. And each of these maps were evaluated. And other ones that didn't make the book were evaluated for their utility and by both the grantees in Georgia, and the OIG. And we tried to perfect the most

valuable of these maps, and while cutting out the ones that were less informative for us.

We developed a set of technical standards and procedures and methods because the hope is that we could take this mapping and in the future we could do it in Wyoming, or New York City, or we could do it from year-to-year, and then the maps could be directly compared and decisions could be made from these maps from different places.

So the hope is that this has a way of being more broadly used. And then, afterwards, the maps, the evaluation, and the lessons learned in the project were captured, and they will be available in a forthcoming final report.

And now if I can draw your attention to the screen, I want to show you some examples of the maps we created. Is everybody comfortable? Is that okay?

A PARTICIPANT: Yeah.

MR. JURKEVICS: The first map we're looking at here today shows the 2000 census poverty distribution across the U.S. with all of the grantees are grants, main and branch offices shown as dots. So that's a main office. Boy, have I got the shakes today. And these are branch offices, the green dots.

And I'd like to accustom you to the color scheme that we used here where the lighter yellow -- as we can see the bar here, the lighter yellows represent lower numbers or lower poverty populations, and the hot are dark colors represent more or greater intensity.

On this map, you'll note -- oops, over here in California, there are 4.7 million persons in poverty, as captured by the 2000 census, about 14 percent of the nation's total. Texas had 3.1 million persons in poverty, while New York state had 2.7.

This map shows the change in state poverty population as a percentage of the national poverty total between the 2000 and 1990 censuses. In an effect, this map shows the changes in the proportion of LSC funding that each state would receive if level funding were appropriated. And we're not taking into account any 19 million that might be added to this. So this is on a level funding scenario.

The yellows here represent increases in funding, while the blues show loss of funding. And what's so striking on this map is this solid patch of blues concentrated mid-continent while the yellows are all on the coasts. And that kind of insight is simply not possible by looking at this data in a table.

North Dakota, here, shows the greatest loss, just

over 21 percent, with Iowa a close second, also over 20 percent decline. And on the other side of the equation, we have Nevada here, which gained over 60 percent, I think, almost 62 percent in the 10 year period.

It's not as visible on this map, and often you need more than one map to tell a story here. But of the nation's total increase in about 2 million persons in poverty, California alone accounts for more than half of that number, about 55 percent. And under the level funding scenario then, California would receive or would gain \$7 million to reach about \$40 million in total in funding.

Now turning to Georgia, which was the focus of our mapping evaluation project, we worked with the Georgia grantees and but about five or six of these maps were done in Georgia.

This map shows the poverty population in that state. And, again, as before, we saw the darker reds mean more persons in poverty. And we can see the concentrations of persons in poverty in urban areas like Augusta here, Savannah, and then this metro Atlanta area.

The area here within the green line, if I can steady my hand, within that green line, that represents the five county service area of ALAS. And the rest of the state, the remaining 154 counties -- and that's what these

are, each of these -- there is 159 counties in the state served by GLSP. And they operate these 10 regions.

The regions are defined by these green boundary lines, and out of these 12 regional offices that you see with such way process labeled there. The Piedmont area, which is this service area just around Atlanta, is served under the GLSP headquarters which is located in Atlanta itself.

Now on the right hand side, we show the change between the 1990 and the 2000 census. And, as before, we saw on the national map the yellows and the oranges show increase in poverty population while the blues show a decrease in persons in poverty.

In the ALAS area, which is right in the metro land area, the poverty population increased by 30 percent from 1990 to 2000, a significant increase. And here this red county, that's Gwinnett County, have the most growth, which is they went from 14,000 to 33,000 in the 10 year period, a significant growth.

And this information was used to confirm

Mr. Gottlieb's conviction that the Gwinnett office needed to

be made in a full-time staffed office, and ALAS provided

this map to local judges, lawyers, and community leaders in

a local fundraising effort to support that office.

In the rest of the state, outside the ALAS area, the GLSP increase in poverty population was just over six percent in the 10 year period. And at the bottom, you see this is Echols County, it had a lot of growth but it's a fairly low population county. There is about a thousand persons in poverty in that county.

In our opinion, these maps are best looked at together. You sort of need the one to capture what's going on in the other one. And knowing more about the movements or changes in the poverty population is key to an efficient legal services delivery system because it drives things like office locations, and staff resource allocation, and other state-wide planning functions.

Now this map shows the concentrations of incomeeligible persons in the state, which is persons falling at or below 125 percent of the poverty line. And about 1.2 million income-eligible persons are in Georgia and are represented on this map.

I'd like you to note that we're using now the 1990 census data because most of our project, you know, it takes some number of years for Census actually to release its census data. For most of our project, only the 1990 census data was available, and the 2000 data wasn't released yet.

The 2000 data has since been released. It was

broadly released in about October for this area. Although you have seen so far 2000 data, most of it was done with this 1990 data. So you have a bit of a mismatch in cases and what we're showing the income-eligible persons, albeit, who admit that issue, and it probably needs to go back and update that.

Well, as before, the deeper the red, the higher the density of income-eligible persons. In this white area here, that white area is Fort Stewart and the census doesn't tabulate in the military area there. So that comes out as white, and correctly, from the census perspective.

Now we'd like to look at a close up of the ALAS service area in Atlanta. And, again, now we can see ALAS's six offices that they maintain in the Atlanta area, the green dots there, and also you can see the county lines. So this county that stretches from top to bottom there, that's Fulton County.

Now when you look at the income-eligible persons, they are concentrated inside the parameter in downtown Atlanta in the densest part of the urban areas. You can see these dark red clusters of income-eligible persons.

And Fulton County and DeKalb County together accounted for 210,000 income-eligible persons on this map.

And the issue here was that in the past grantees only had

tables, you know, aggregated at the county level to show, you know, what the income-eligible were.

They were never able to see where, in fact, the income-eligibles were or show it to anybody else, a funding source to show this is a -- so it's a very practical matter having this kind of information at your disposal.

So now we look at the other side with our cases closed in Georgia, and this represents the cases closed by GLSP. Here the ALAS area is deliberately omitted because we made this map for the use of Ms. Phyllis Holmen. These are cases closed in the five year period from 1996 to 2000. And about 90,000 closed cases are represented on this map. They were closed by GLSP.

Now on the right is the change in cases closed between the two end years, '96 and 2000. And we can note, as you are used to the colors, where the blues are declines, and the yellows and oranges are increases, we know in particular the dramatic increase here in Savannah and in the Macon office.

And we'll get back to that later, as to why those increases were. We had to put together a series of maps, and eventually we got to the bottom of it through this technique.

And the rest of the map generally shows the

increases -- if you'll recall where the poverty populations increase, they were either around the urbanized metro areas. And you see just outside the ALAS service area here there is increases.

And you can also see that this Dalton office up here certainly increased its case closure between those two years, as did regions down here in the bottom right.

Now it's important to bear in mind that in this project we weren't evaluating the grantees performance or the performance for its regional offices. We were evaluating mapping as a tool. So we are not -- there is not a comment made upon that. It's the tool. Does this have a utility? That was important to us in this project.

Now digging deeper into the case data that we received, we look at case closures for clients identified as Hispanic again in ALAS service area. There has been a strong growth in Hispanic populations in the Atlanta area. And that poses a language challenge in the provision of legal services -- to Mr. Gottlieb.

And this is reflected in the growth of Hispanic closed cases between 1996, which is this map, and 2000, which is this map. Your eye is drawn to these areas that are -- this will be called a suburban area of Atlanta.

These areas in DeKalb and Cobb County show these

growths. And now the maps will toggle back and forth between the two. So you can see the case closure increase. And that's all in this -- these suburban areas. And these maps together demonstrated to Mr. Gottlieb that ALAS is, in fact, penetrating the Hispanic communities.

And you can see from this that mapping would be a valuable tool in validating the results of various outreach and access initiatives in showing how these programs were working, and whether they were reaching the target population. So, you know, we see mapping as a component of various access initiatives.

Now further drilling in, this is the city of Atlanta proper. So Fulton County extends way down, and way up, and the city of Atlanta proper just goes over here into DeKalb County just a little bit.

And Mr. Gottlieb wanted a map just of the city to show city officials and possible funders the level of that ALAS activity within the city limits. The red background was the density of income-eligible persons. As we saw before, you see those very dark areas of income-eligible persons in downtown Atlanta.

And on top, you can just barely see it, it looks like a case of the blue measles is up. There is a blue dot here. They are for every case ALAS closed in the five year

period.

And what we were trying to do here is on a map is represent some access measure or some, you know, representation of access. And what you hope is that you'd see the blue dots, you know, cluster, in thicker clusters over the darkest density of income-eligible persons.

And, in fact, I think that's exactly what that map demonstrates. In fact, in some areas here, the blue dots are so thick you can't even see the underlying color.

Now this map is an effort to get around that problem of the case dots obscuring the underlying income-eligible populations. And so, what we see here is the --again, the GLSP regions with the green outlines here -- and for each one we calculated the cases the office closed in one year per thousand income-eligible persons in the service area.

And the results here range from less than 10 cases in these service areas, Gainesville, Athens, and Augusta, to over 25 here in the Savannah service area. And the colors of these access levels are standardized. And this could be compared from region-to-region, or even indeed you know in a different state.

And we view this as a potentially valuable tool in contributing to the understanding of access, keeping in mind

of course that each office has its own, particularly, context and circumstances as to, you know, and the nature of the services that it provides.

Now we're looking at that same access measured here, which is the cases closed per thousand income-eligible persons, but in more detail in the service area of GLSP on the left, and ALAS on the right.

In the GLSP area, a greater level of access is seen in areas like Savannah and in Macon, where you see those oranges. And here it's -- just to put this in perspective -- in this neighborhood here, in Gwinnett County, ALAS closed less than 10 cases per thousand incomeeligible in 2000.

Meanwhile, across the county line in this neighborhood here, the service level has over 250 cases closed per thousand. So which begs the question why? And I'm sure that there is, you know, great explanations.

The yellow one might be a big country club, or there is something. But it asks you to look, keep looking into this. And maps like these raise valuable questions about equality of access to services, and questions that are important for legal services managers to pursue. And we feel that they could be used in a broad set of circumstances.

This map of the Macon service area just south of Atlanta shows that same access ratio, and it's about 100 miles from here to here, just to give you a sense. Now, as we zoom in on that, these circles, the concentric circles show the 10, 20, and 30 mile driving distances from the regional office.

And driving distance might be an inhibitor to access for rural clients visiting the office, or for lawyers visiting rural clients. Individual cases closed are shown on the map as dots again. We've got that measle effect where the brief service are these blue dots, and then underneath those are the red dots which represent extended service.

And this map shows that extended legal services are indeed available to rural clients. You'll see there is a good representation of red dots up here towards Dublin.

Now this map has some undercount of rural cases.

Because the addresses in that area are often not much more than a P.O. Box or a rural route, and are difficult to place on a map. And we are looking at ways of getting around that.

Now we show you these two maps just to indicate that there is other types of case information can be displayed on a map. On the left, we have the GLSP cases

closed and the legal county of family.

And on the right, GLSP wanted to see the distribution of cases supported by Older Americans Act funding to show the extent of its activities under that funding source for the first time.

Now these are littler maps. We'll show you the bottom two in a second. On the left, we have a map of the GLSP on the left here. We have a map of the GLSP regional service areas showing the average cases closed by each attorney in the offices. And the figures range from 125 cases closed per attorney in these service areas to 350 per staff of 30 in these offices.

And as I indicated before, the map on the right shows the reason why. And the map on the right is the PAI, the private attorney involvement map. So it shows the cases closed by PAI.

And you'll see here that, in fact, the Savannah, and the Macon offices have very active PAI programs which has contributed to higher case closure rate, and has shown up in the higher level of service on several occasions for those service areas.

Now on the lower right, I'll ask you to draw your attention to the map on the right hand side. We show the number of attorneys for a thousand income-eligible persons,

slightly a different measure than on the top.

In here, the Dalton and the Valdosta regions have a ratio of seven attorneys per 100,000 income-eligible persons. That's over 14,000 income-eligible persons per attorney.

And maps like this really visually convey a lot of program information, and they indeed show just how resource-constrained this legal services field really is -- for one person to be handling 14,000 income-eligibles is quite a task.

Now we're stepping back. As we have drawn to a close, mercifully, we are stepping back to the national perspective. And we see the LSC documented cases closed by state in the five year-period, 1996 to 2000, and there is over 6 million.

I think it's 6.2 million cases closed represented on this map. It's a real great accomplishment. And, as expected, California here leads with almost 750,000 cases, followed by Texas, New York, Michigan, and Florida, each in the 300,000 range; Illinois just behind that, over 250,000 cases closed.

And then you'll recall that access measure that we developed which were the cases closed per thousand income-eligible persons. And for the nation as a whole we mapped

out on a state-by-state basis and here is the result.

There is a number of observations that are possible here. First, there is Nevada. And in Nevada, there were less than six cases per thousand income-eligible persons closed in 2000. And remember that Nevada had the highest growth rate in poverty population, over 60 percent.

But its resources were back from the 1990 census and 2000 still. So while it has had this great growth, we have seen this low proportion of cases closed per incomeeligible in 2000.

Now, at the other end, we have Iowa right here.

In Iowa, we are over 60 cases per thousand income-eligible persons were closed in 2000. So that means that between Iowa and Nevada that Iowa had 10 times greater cases closed than Nevada.

And just a brief closing or remark, the maps you have seen here today are only a small number of what we have produced. I think they pretty reasonably represent the potential of mapping for legal services. And I'd like to turn it back to Dave.

MR. MADDOX: Okay. Ed, thank you for that presentation. A summary of Ms. Holmen's and Mr. Gottlieb's comments have been provided in your board book. You will find them on --

Well, the OIG project summary starts right after page 35 in your board books, and their comments are provided on page 7 of that section. A comprehensive report including lessons learned, the maps, and an analysis of how the maps can be used as a management support tool to improve services will be released shortly.

At this point, I'll turn it back to Len.

MR. KOCZUR: I thank you for your attention. I'm not sure how much time we have left. But I think we can take a question or two, if you have any.

CHAIR WATLINGTON: Maria.

MS. MERCADO: You had mentioned that the majority of this mapping that you did was not based on the 2000 census. Are you going to update that, so that we have a more accurate reflection of actually the poverty count, and the resources available, and the delivery of legal services, and the different programs?

MR. KOCZUR: Both the Georgia grantees have indicated some interest in using the 2000 census data to produce maps. And, yes, we're looking at doing that. I think it's pretty certain we'll move in that direction and produce that map.

MS. MERCADO: Well, I mean, because it would make
-- both for services of funding, for services of where it is

that you should allocate your resources, the few resources you have, and, of course, also for fundraising in those local states.

MR. KOCZUR: Yeah.

MS. MERCADO: In figuring out where the -because, as you say, the population shifts. Even in your
own mapping from --

MR. KOCZUR: Yes.

MS. MERCADO: -- '90 to '96, and so then we need to have more accurate account. I mean I am sure that the programs themselves have an idea of where it is, but sometimes it's better if you have the documentation and the data.

MR. KOCZUR: Yeah, certainly. As I said, we'll be working with the Georgia program. I think one thing the maps show also is that with our funding based on 10 year old data, it creates a real disparity, as indicated in Nevada and Iowa.

So I think perhaps this board or the next board might give some consideration to a legislative objective of adopting a different type that we could update during the 10 years. The census produces a number of reports on population.

There might be a better way of distributing the

funds rather than waiting for 10 years; and, of course, as we have the problem this year with a big reduction for certain programs, for certain states, so that we might be able to solve that through a change in the law allowing adjustment through the 10 year census period.

CHAIR WATLINGTON: Edna.

MS. FAIRBANKS-WILLIAMS: You referring to private attorney involvement, now this is the private attorney involvement that you sent a case to them.

Was there money paid to them adjudicary, or did they do it pro bono?

Did you count both kinds or just one kind?

MR. KOCZUR: Yes, we counted whatever the Georgia program -- in that case, Georgia Legal Services, counted as a PAI case. So we used their data. We did not modify it or adjust it in any way. The data they would use to manage their program, that's what we used for the mapping.

CHAIR WATLINGTON: Bill.

MR. McCALPIN: I wonder what was the cost of this exercise, and recognizing that the first time around costs more?

What would you expect it would cost to do this sort of thing in another state now?

MR. KOCZUR: We originally budgeted \$200,000 for

the project. We spent about 160,000 on doing the Georgia phase of it. We have a plan to spend -- to expand the project. We're talking with some other grantees over the next two years is spending approximately \$380,000.

MR. McCALPIN: Per state?

MR. KOCZUR: Well, no, that's over -- we would do another state. Hopefully, we have been talking with the California grantees. But, eventually, we would like to develop a program -- which is more than a program -- a process by which the grantees could create their own maps, and we would put it on the Internet, or on either our site or the LSC sites where they could go.

There would be a series of standard maps that they could produce that we would think getting grantee input that all grantees would be interested in, as well as the ability to customize maps. And once we reach that point, then the creation of individual map grants -- maps by an individual grantee would be relatively inexpensive.

MR. EAKELEY: I just -- I want to remind all of us that when we experienced the first flush of results from the technology initiative, the Office of the Inspector General was encouraged to remember the, not always clear, dividing line between the programmatic responsibilities of the corporation and its management, and the OIG's consultative

advice and counsel.

What you have just said in response to

Mr. McCalpin suggests that you may be approaching the line

of programmatic initiatives. And I'd just encourage you to

coordinate with the president of the corporation, and the

vice president of programs on that.

MR. KOCZUR: Certainly, we would do that. And it's not our objective to run this program long-term. At some point, hopefully, the corporation would see the value. We would prove the value, and the corporation would agree, and would take over the program. We don't intend to do this type of work indefinitely.

MR. EAKELEY: Well, we don't have to explore it here, but I feel nervous when the IG says he's going to run a program. But, in any event, we don't need to take up the time in this meeting on that.

CHAIR WATLINGTON: Since you -- Bucky.

MR. ASKEW: Thanks. This is very interesting, probably more so to Mr. Strickland and myself than anybody else in the room, but very interesting stuff.

I'm curious. As you said, Ed, I think, this frequently raises questions, it doesn't necessarily provide answers to anything, but it does raise a lot of questions.

My understanding, Len, is this was developed in

hopes that it could be a management tool for programs. And I can see the value of that from just what you showed us today, how a program director or staff could look at this and begin asking a lot of questions, or maybe using it to make some programmatic decisions.

I'm wondering if you see a value of it to the corporation beyond legislative value, in terms of demonstrating to Congress what we're doing, but, beyond that, if there is a value to the staff of the corporation in using these maps?

MR. KOCZUR: I think there is some potential in the future, as we move towards the outcome evaluation, that kind of thing, that maps could be useful.

But, yeah, I would hate to get in a situation where maps were used as a punitive saying, "This program closed 5,000 cases per attorney, and the other one only did 300. So it's a good versus bad."

I don't think -- I don't see it going that way.

But it would raise questions for our -- for the management to say, "Well, why did this occur?" In a lot of cases, there is a very good reason for it.

But, yes, I see that it does have value. It should value in the long-term for the management. And, as I indicated, we are coordinating with the management, with

Glenn and Michael, as we go along on this.

MR. ASKEW: Good.

CHAIR WATLINGTON: We want to kind of go into the next panel. We'll take three more questions.

MS. BATTLE: I just wanted to follow up on Mr. McCalpin's question about the 380 in the next phase, and what specifically in addition to California you intended to do?

MR. EAKELEY: Let the record reflect that Justice Broderick has just returned to the court after a long absence.

(Applause.)

MR. EAKELEY: The record should also reflect he is looking even younger than before.

MR. BRODERICK: Well, I just want to say, as my uncle said to me in July, he said, "John, you look better than you did before." I said, "I can't take that as a compliment."

But anyway, I didn't mean to make a stage entrance. I was away, but I cannot tell you, my board members, and those of you who are here, how much I have missed being here. And good luck.

MR. EAKELEY: Great to see you.

MR. BRODERICK: I'm sorry to interrupt the

presentation. Great to be back.

CHAIR WATLINGTON: It was welcome. I have forgotten where we were. Are we ready? We can go into the next panel if all questions --

MR. KOCZUR: I need to address the question.

CHAIR WATLINGTON: Yeah, was someone answering your question?

MR. KOCZUR: Of course, the California project will be -- will take some of those funds. We would hope at the end of that project we would be able to have a standard process that could be placed on the internet, again, working with management, that the grantees could use -- could make their own maps. That's our ultimate objective.

MS. BATTLE: Okay.

MR. KOCZUR: So -- and at that time, they would be -- that would be relatively inexpensive, and I don't have cost figures on that. But it's something that we would hope would be repeatable, and the grantees could use on their own without a lot of technical support.

MS. BATTLE: Okay, thank you.

MS. MERCADO: And just a follow-up to that, it would seem that even in the proposed program that you want to do for California that a bulk of your costs could already be decreased by the existing mapping.

As far as the raw data on poverty populations and sheer populations -- not as to the actual cases closed by those grantees or actual clients served by those grantees, obviously, that's very specific data that the grantees that wouldn't necessarily be available to the general population.

But all of the other mappings now currently exist that have been put out in the 2000 census. And it actually isn't the Office of the Census Bureau that produced them.

I want to say that it's the Department of

Agriculture, but I'm not sure, that already has these

mappings, and maybe that might reduce the costs to some

extent.

MR. KOCZUR: Yeah, and certainly the lessons we have learned in this first, we have had quite learning curve -- really technical. And I think it will certainly be less expensive the second time.

MS. MERCADO: Thank you.

MR. KOCZUR: Thank you.

CHAIR WATLINGTON: Okay. There being no other questions --

MR. KOCZUR: If you have additional questions, Ed and Dave will be around for most of the morning, anyway.

MR. EAKELEY: Thank you, very nice job.

MS. MERCADO: Thank you.